# Petar Peychev

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As a Software Engineer with over two years of experience in the big data space, I am excited by learning new tools, exploring the tech stack at every level and building great software. I believe that complexity is the greatest challenge in software engineering and that every solution should be made as simple as possible, but no simpler.

## Experience

#### Data Engineer (Associate) - The Very Group

2022 - Present

Helping build a modern data lakehouse, internal tools for ETL / orchestration and data pipelines for pivotal projects where reporting is critical for regulatory compliance, customer experience and business insights.

- Designed and developed a YAML-based framework for low-code ETL workloads which is now used across 50+ data
  pipelines. Currently working on re-building it as a Python library with a clean API, to be used for pipelines orchestrated via
  Mage.
- Worked with business stakeholders to design and build data pipelines for projects such as a new in-house insurance/warranty system, Salesforce CRM and CallMiner speech analytics. This data is now widely used across the business for regulatory compliance, reporting and analytics.
- Made improvements to software quality by introducing static type checking for Python, code complexity metrics and test
  coverage in CI pipelines and pre-commit hooks. Contributed code structure/style guides for Python and Scala.

Tools - Python, PySpark, SQL, Scala, AWS, Terraform, Docker, Gitlab, Jenkins, Atlassian Suite.

#### Product Engineer - Jaguar Land Rover

2020 - 2021

Worked in a multidisciplinary team of data scientists, analysts and engineers to build software for analysing performance of autonomous driving systems.

- Developed a behaviour-driven testing framework for verifying autonomous driving systems using Behave and Jira Xray. This was done as part of a wider business initiative to understand and reduce defects on the production line.
- Improved data validation in our pipelines by moving from SQL scripts to using Great Expectations to prevent quality issues.

Tools - Python, SQL, Terraform, Docker, Kubernetes, GCP, GitLab, Atlassian Suite.

## Education

#### BSc (Hons) Computer Science - Nottingham Trent University

First Class Honours | 2018 - 2022

Awarded department award for excellent overall performance, managed the Developers' Society, organised hackathons and workshops.

### Interests

**Languages & Compilers** - I frequently experiment by building my own toy languages to explore topics, such as concatenative programming, functional programming, algebraic data types, refinement types and structural type systems. I also listen to podcasts, read articles and follow work on promising new languages, such as Zig, Odin, Jai, Roc, Hylo, Unison, Koka and Mojo.

**Esoteric Computational Curiosities** - Handmade Hero & The Handmade Network, cellular automata, property-based testing, Xanadu, IPFS, non-hierarchical file systems, Joe Armstrong & Erlang, APL, Manfred von Thun's Joy, functional data engineering, data mesh, superoptimisation, Bartosz Milewski's 'Category Theory for Programmers' and loads more.